2011 Military Health System Conference DoD/VA Health Information Technology (IT) Data Sharing to Benefit Our Patients

The Quadruple Aim: Working Together, Achieving Success

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Session Objectives



- Upon completion of the presentation, participants will:
 - Discuss the current DoD/VA health data sharing initiatives
 - Identify how providers currently access health data through the Departments' electronic health records
- Discuss factors influencing the need to broaden data sharing initiatives to include private sector and other

DoD/VA Data Sharing Stakeholders



- Beneficiaries
- Providers
- Military Services
- Government Accountability Office
- Office of Management and Budget
- Congress
- Executive Branch



Military Health System (MHS)



- Over 9.6 Million Beneficiaries
 - 42% active duty, 58% retirees and dependents
- Direct Care:
 - Over 720 fixed medical and dental facilities
- Purchased Care:
 - Over 350,000 Civilian
 Providers accept TRICARE





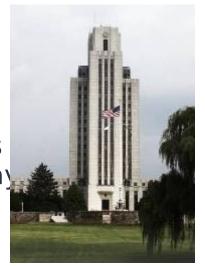
(EHR)

Footprint (Sustaining Base)



Supporting <u>transient</u> patient populations and <u>transient</u> health care teams

- AHLTA Worldwide
 - Covers Every Time Zone
 - 9.6 Million Beneficiaries
 - 162 Million Outpatient Encounters
 - 148,000 Additional Encounters/Day
 - 77,000 Active Users
 - White House Medical Unit
- MHS Inpatient Solution
 - 53 Sites (over 86% of DoD Inpatient Beds)
 - Continued Deployment in FY 2011





(Theater)



- Operation Enduring Freedom/ Operation Iraqi Freedom
 - Over 3.7 Million Outpatient and 51,000 Inpatient Clinical Encounters captured electronically
 - Over 8.6 Million Orders for Ancillary Services (inpatient and outpatient laboratory, radiology, and pharmacy)
 - Iraq, Qatar, Kuwait, Afghanistan
 - EHR capability on board ships





Department of Veterans

Affairs



- Over 8.1 million enrollees
 - Increase of over 105 percent since 1995 (2.5 million enrollees)
- Over 5.7 million patients
 - Older, sicker and poorer patient populations
- Over 1,300 Direct care sites
 - 152 medical centers/hospitals
 - 784 clinics (hospital, community-based and independent)
 - 277 counseling centers

Source: 43 Statistics (Spingley) A Parais, October 7, 2010

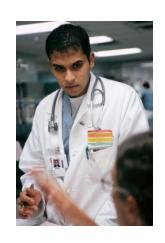


Department of Veterans Affairs

(continued)



- Over 86,000 Health Care Providers
 - 15,000 Physicians
 - 38,000 Nurses
 - 33,000 Allied Health Professionals
 - 10,000 *fewer* employees than 1995
- Affiliations with 127 Academic Health Systems
 - 25,000 affiliated physicians, 36,000 residents and fellows, and 25,000 medical students
 - 114,000 trainees in all disciplines
 - Nearly half of all US health professionals (65% of US physicians and 50% of US psychologists) have had some training in a VA facility
- \$1.7 Billion in Research (Rehabilitation, Health Services, Clinical, and Basic)





Motivations for Sharing Data



- Close proximity or co-located facilities
 - Joint venture sites/local sharing agreements
- Reserve/Guard medical care
 - Care in VA post-demobilization
 - Care in MHS when remobilized
- Service members post-separation
 - Continuity of care
 - Determination of benefits







Point of Separation



305 million messages (DoD to VA) on 5.3 million retired or discharged Service members

- Lab results
- Radiology reports
- Outpatient Rx data
- Allergy information
- Discharge summaries
- Consult reports

- Admission/discharge/ transfer information
- Standard ambulatory data record elements
- Demographic data
- Pre-/post-deployment health assessments
- Post-deployment health reassessments*







^{*}Transmitted weekly for individuals referred to VA for care or evaluation

Shared Patients



Supports care for more than 3.9 million patients to date DoD providers access VA data through AHLTA VA providers access DoD data through *VistA CPRS or VistAWeb Specialists in VBA access DoD data through *CAPRI

- Allergies
- Outpatient pharmacy
- Demographics
- Inpatient and outpatient lab results
- Radiology reports
- Ambulatory encounter notes
- Procedures
- Problem lists

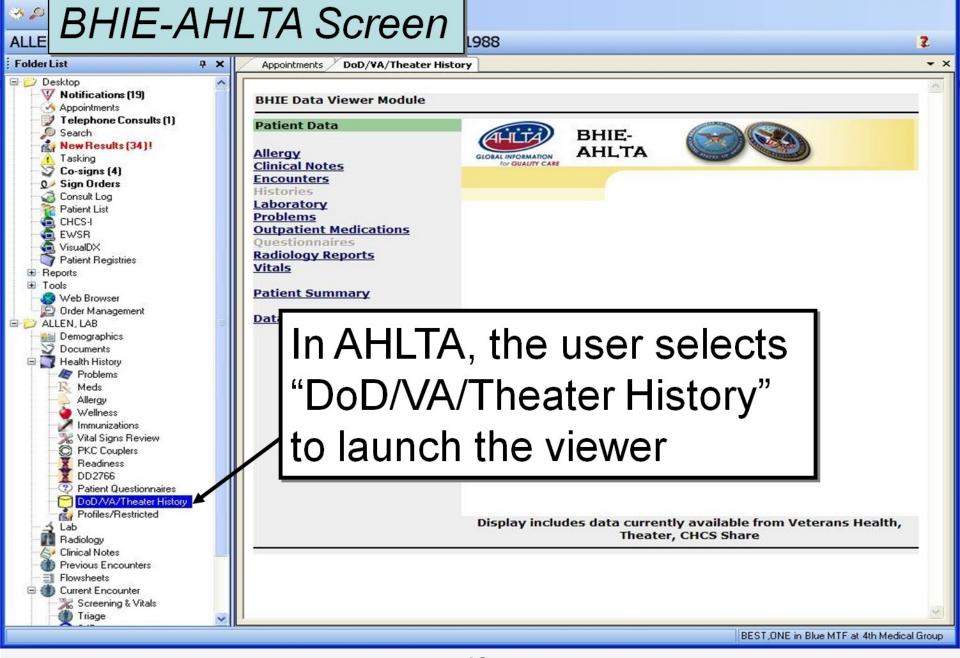
- Inpatient note's (from DoD Essentris sites)
- Theater clinical data
- Vital signs
- Family history, social history, other history
- Questionnaires





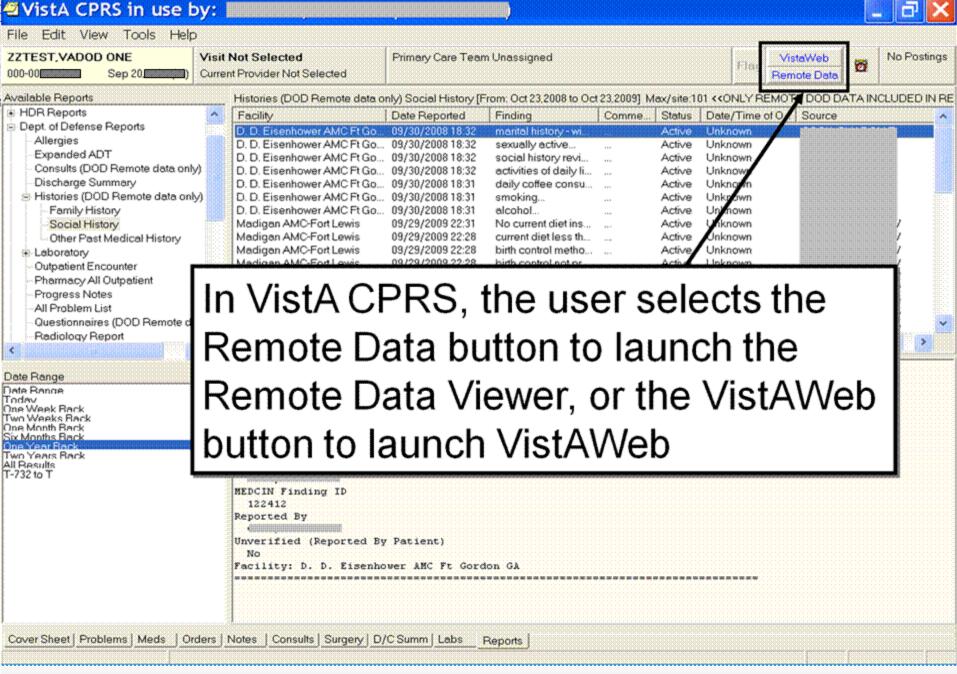


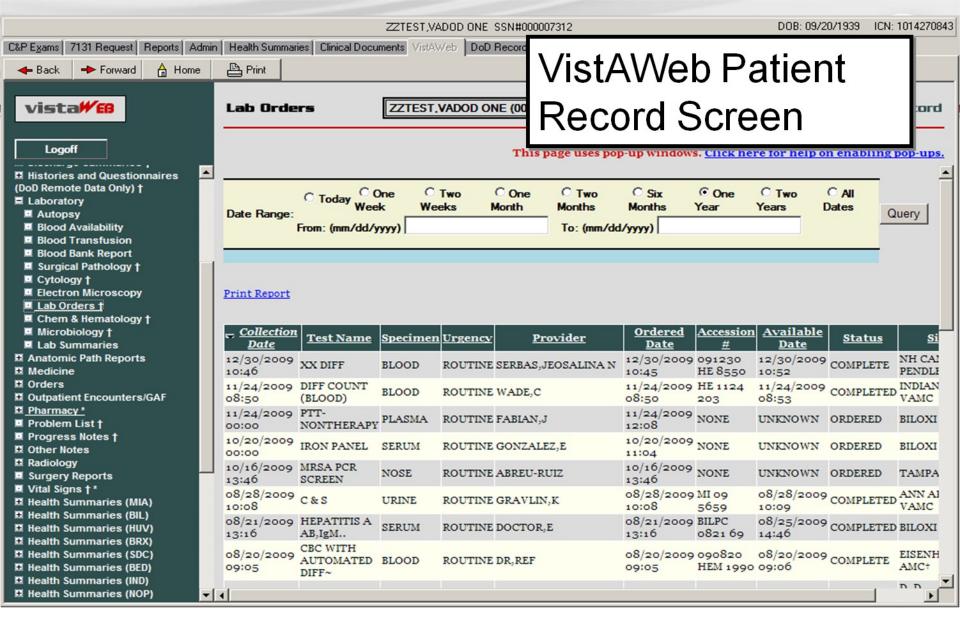
- * VistA Veterans Health Information Systems and Technology Architecture
- * CPRS Computerized Veterans Health System
- st CAPRI Compensation and Pension Record Interchange 11

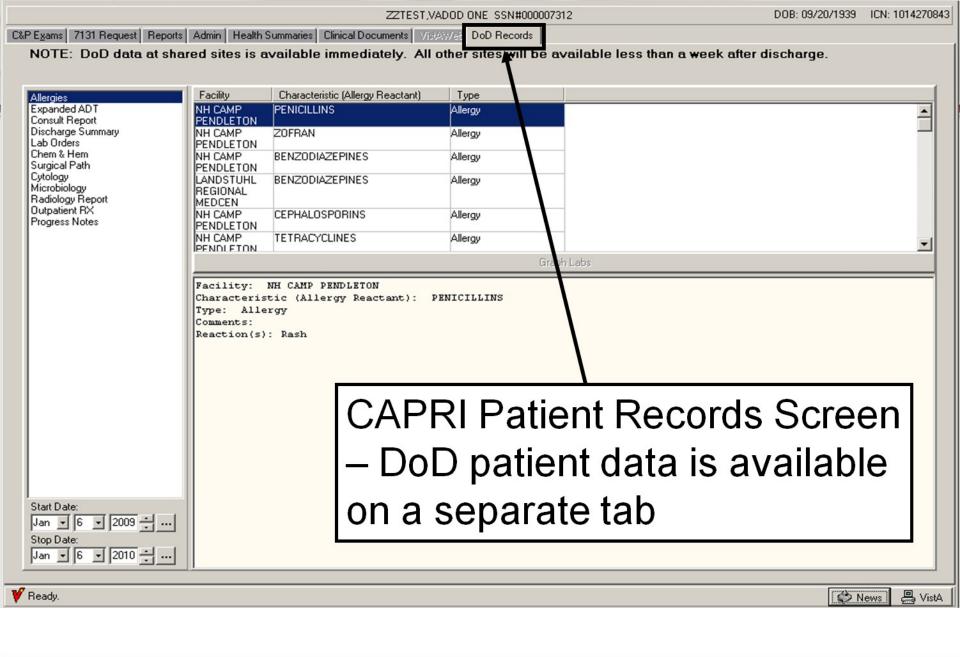


C V S S C V

File Edit View Go Tools Actions Help







Computable Data

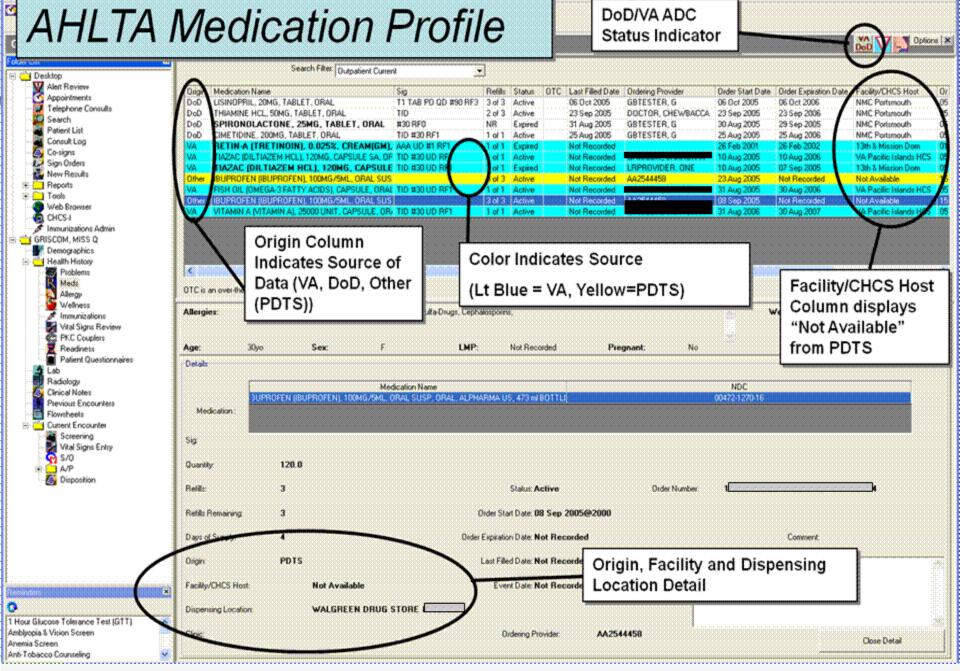


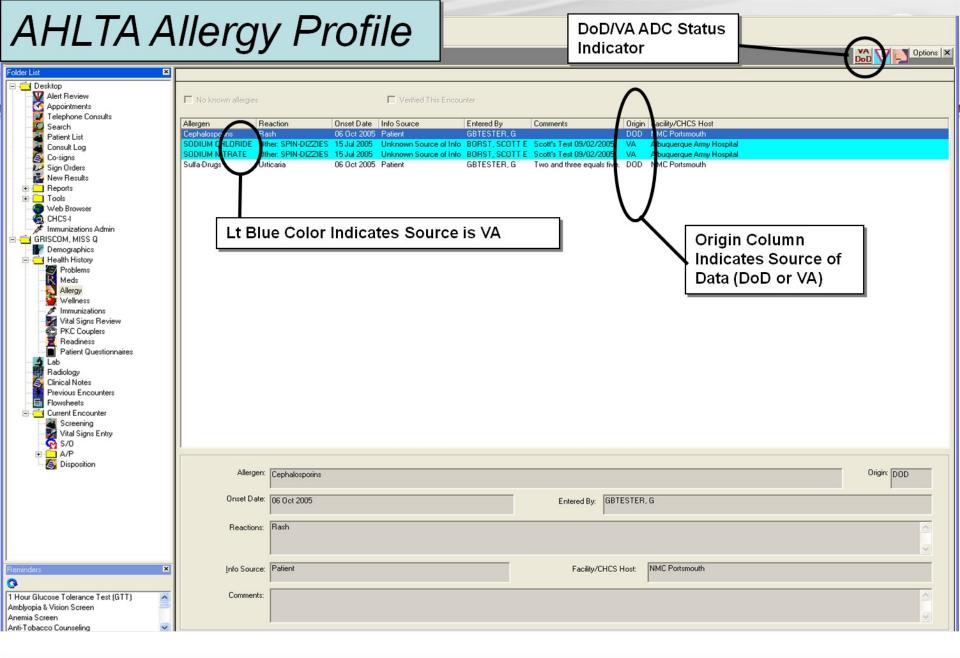
- Supports interoperability between DoD's Clinical Data Repository (CDR) and VA's Health Data Repository (HDR)
- Standardized, computable outpatient pharmacy and medication allergy data
- Computable data supports real time drug-drug and drug-allergy checks using data from both DoD and VA
 - For shared patients set as "active dual consumers," data is seen enterprise-wide

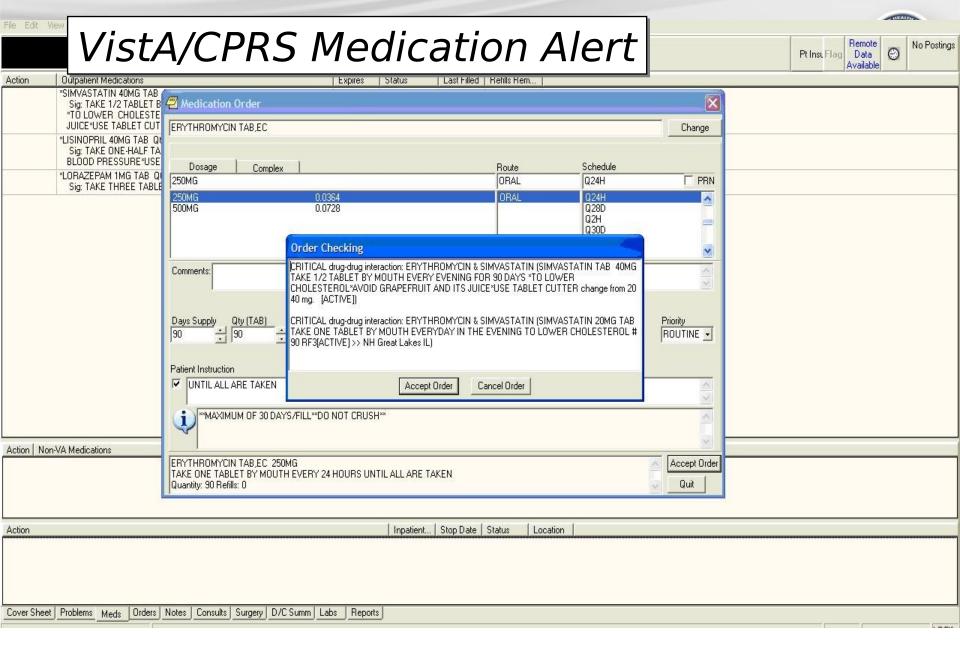












Wounded Warrior Image Transfer



Digital radiology images and scanned medical records for severely wounded warriors sent from DoD to VA when the decision is made to transfer the patient (inpatient to inpatient)



- Walter Reed Army Medical Center
- National Naval Medical Center
- Brooke Army Medical Center

Data push at time of referral____





- Tampa Polytrauma Center
- Palo Alto Polytrauma Center
- Minneapolis
 Polytrauma
 Center
- Richmond Polytrauma

From 2007 to present:

- Images for more than 335 patients
- Scanned records for more than 420 patients

Image Sharing - Pilot Project



- El Paso imaging demonstration project
 - Radiology images shared between a limited number of DoD and VA facilities and users in a specified geographic region
 - Lessons learned and technology components will be leveraged for enterprise-wide image sharing



Image Sharing - DoD Future Capability



- DoD Health Artifact and Image Management Solution (HAIMS)
 - Web-based solution
 - Key capabilities: Import, view, manage, edit, register, and store
 - Successfully demonstrated initial capability to share scanned artifacts with VA, in a test environment, in September 2009
 - DoD Limited User Testing bega
 December 2009 at the first site







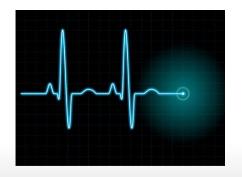
Image Sharing - DoD Future Capability (continued)



- DoD Health Artifact and Image Management Solution (HAIMS)
 - Global awareness of and global access to artifacts and images, including:
 - Scanned documents
 - Digital radiographs (X-rays, CTs, MRIs, mammography, and sonograms)
 - Clinical photographs (endoscopy, laparoscopy, retinal scans, and anatomic pathology)
 - Video
 - Cardiographic EKGs and echocardiographs







HAIMS Limited User Test Sites



- Army
 - Madigan
 - Large
 - Ft. Irwin
 - Medium
 - Bassett
 - Small
- Navy
 - Balboa
 - Large
 - 29 Palms
 - Medium
 - Pendleton Small
- Air Force
 - Andrews
 - Large
 - Patrick
 - Medium
 - Bolling
 - Small



- PACS
- **△**dapter Web Link Central HAIR
- HAIR Health Artifact Imaging Repository
- PACS Picture Archiving System

2011 MHS Conference

Image Sharing - VA Capability



- VA VistA Imaging System
 - Facilitates clinical decisions
 - Provides clinicians with multimedia component of patient record
 - Images are integrated into patient record
 - Records are available on the clinician's desktop
 - Enables VA image sharing enterprise-wide
 - Clinical images, scanned documents, motion video, electrocardiograms and other non-textual data files
 - VA enhancements will enable view of DoD HAIMS data
 - DoD scanned documents (neuro-cognitive assessment tool data)
 - Radiological images

Image Sharing - VA Capability (continue)

VistARad

- Over 40 million studies viewed
- Studies viewed per month: about 550,000
- More than 140,000-150,000 studies interpreted each month
- Studies viewed remotely per month: 35,000-45,000

Clinical Capture and Display

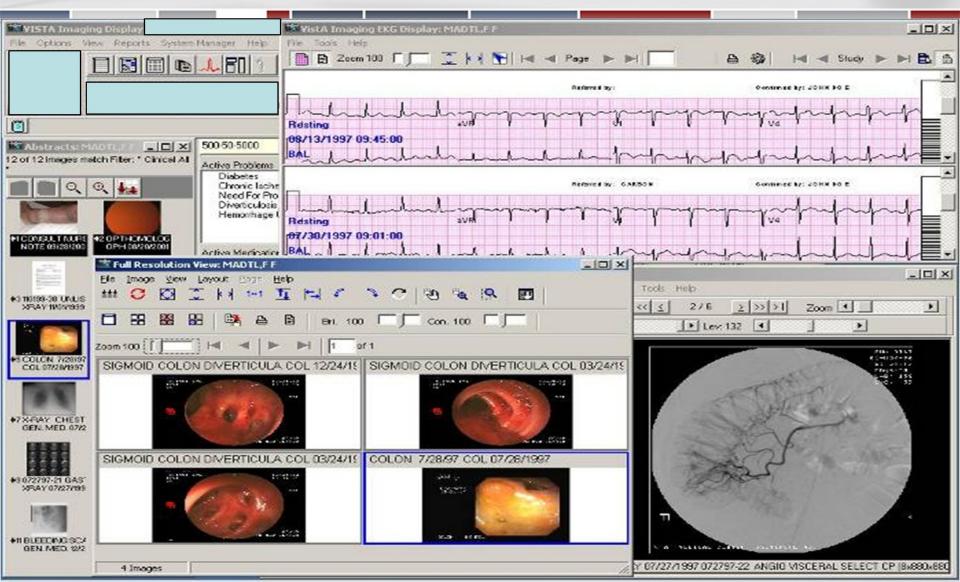
- 1-1.4 million images captured every month
- As of October 2010, 60+ million images captured
- 9-12 million images viewed monthly
- More than 1.6 million scanned documents captured every month

TeleReader (Diabetic Retinopathy Screening)

- 450,115 studies completed (more than 4.0 million images)
- In October 2010, 12,501 studies were completed

VHA - VistA Imaging





Interoperability



- National Defense Authorization Act (NDAA) FY 2008, Section 1635 required DoD and VA to "develop and implement electronic health record (EHR) systems or capabilities that allow for full interoperability of personal health care information by September 30, 2009"
- DoD/VA Interagency Clinical Informatics Board (ICIB) identified high-level interoperability objectives



Interoperability (continued)



- ICIB Interoperability Objectives:
 - Expand DoD Essentris (inpatient documentation system) sites
 - Demonstrate the operation of Multipurpose Partnership Gateways
 - Share DoD social history data with VA
 - Demonstrate initial capability for DoD to scan medical documents and share with VA
 - Share DoD periodic health assessment data with VA
 - Share DoD separation physical exam information with







What's Next?



- Expand inpatient documentation sharing
 - Continue DoD Essentris deployments in FY 2011
 - Increasing access to DoD inpatient documentation to 90% of total DoD inpatient beds by September 2011
- Continue to expand the document scanning and image sharing capability
 - DoD HAIMS deployment to additional Limited User Testing sites in FY 2011
 - DoD and VA schedule for completing implementation of this capability
- Improve usability and other enhancements as defined by functional users
- ICIB objectives for FY 2011 and beyond







James A. Lovell Federal Health Care Center, North Chicago



Baseline Functional Requirements

- December 2010
 - Build a Single Patient Registration process
 - Create Medical Single Sign-On with Patient Context Management
 - Initial Release for Clinical users
 - Follow-up work on administrative users
- 2011 Single Order Entry process (orders portability) for:
 - Laboratory and Radiology (March)
 - Pharmacy (December)
 - Consults

PROUD TO PARTNER





A Look to the Future



- DoD and VA currently share significant and unprecedented amounts of health data
- More than half of DoD and VA health care comes from private sector providers
- DoD and VA need access to private sector health documentation to create a true lifetime electronic health care record

A Week in the MHS



- 21,800 Inpatient Admissions
 - 5,000 direct care
 - 16,800 purchased care
- 1.6 Million Outpatient Visits
 - 737,000 direct care
 - 876,400 purchased care
- 103,000 Dental Visits
 - Direct care only
- 3.5 Million Claims
 Processed

2.48 Million Prescriptions

- 914,000 direct care
- 1.37 million retail pharmacies
- 200,000 mail order
- 2,380 Births
 - 1,010 direct care
 - 1,370 purchased care



Average Monthly Purchased Care in VA



- In FY 2009, VA processed a total of 1.7 million purchased line items for non-VA medical care with the following monthly averages:
 - 234 unique patients for pharmacy
 - 11,051 unique patients for inpatient admissions
 - 72,659 unique patients for outpatient visits
 - 3,885 unique patients for dental visits
 - 213 unique patients for child birth delivery











Future State - Where Are We Going?



 On April 9, 2009, President Obama directed DoD and VA to create a Virtual Lifetime Electronic Record (VLER) that:

"will ultimately contain administrative and medical information from the day an individual enters military service throughout their military career and after they leave the military."



-President Barack Obama

Future State (continued)







- The goal of VLER is to provide seamless access to electronic records for Service members and Veterans through a single portal
 - No one should experience delays in access to services they earned while serving their country because of red tape and paperwork
- Success is dependent on the existence of an electronic health record capability in each participating organization. While VLER builds on that capability, the capability is separately developed and funded

Service Member Health Care Life-Cycle



VA



Recruitment



Accession/Trai



Routine Care



Virtual Lifetime Electronic Record (VLER)



Transition & Benefits Assessment



Care at home/Post-2011 MHS Condep loyment



Care in Transit



Readiness/ Pre-Deploymen



Deployed/Theater Care

Transition to Future State



Current DoD/VA Health Information Exchange

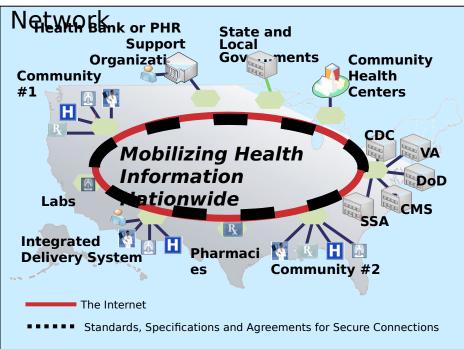
Historical data from 1989 forward, live data flow as of 2002, bidirectional data flow as of 2004, all DoD and VA medical facilities as of July 2007



- Health data on more than 5.3 million Service members
- 3.8 million correlated patients
- 83.9 million lab results
- 13.6 million radiology reports
- 86.4 million pharmacy records
- 101 million standard ambulatory data records
- 4.3 million consultation reports
- 2.8 million deployment-related health assessments on more than 1.2 million individuals

(As of November 30, 2010)

Planned Nationwide Health Information



Legend:

CDC - Centers for Disease Control & Prevention

CMS - Centers for Medicare & Medicaid Services

PHR - Personal Health Record

SSA - Social Security Administration

Questions and Contact Information



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